

## ABSTRACT

The inventive method for processing an RR series comprises a plurality of (RR) samples representing time intervals (dti) between two successive heart beats or the inverse ( $1/dti$ ) of said time intervals consists in selecting (N) (RRi) samples in a main time window having a predetermined length (n), in cutting  
5 said main window into (m) subwindows ( $F_j$ ), in calculating an intermediate parameter ( $A_1$ ) for each subwindow ( $F_j$ ) on the basis of the (RRi) samples contained in the subwindow ( $F_j$ ) and in calculating a final parameter as a function of the intermediate parameters ( $A_j$ ). The invention is used for  
10 analysing a cardiac rhythm variability, in particular for assessing a patient's pain or stress.